# Connecting via Winsock to STN

Welcome to STN International! Enter x:x

## LOGINID:SSPTAYKC1621

# PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

| * * *  | * * | * *   | * * | * Welcome to STN International * * * * * * * * *  |
|--------|-----|-------|-----|---|
| NEWS   | 1   |       |     | Web Page for STN Seminar Schedule - N. America  |
| NEWS   | 2   | JAN   | 12  | Match STN Content and Features to Your Information                                      |
|        | _   |       |     | Needs, Quickly and Conveniently   |
| NEWS   | 3   | JAN   | 25  | Annual Reload of MEDLINE database   |
| NEWS   | 4   | FEB   | 16  | STN Express Maintenance Release, Version 8.4.2, Is                                      |
|        |     |       |     | Now Available for Download  |
| NEWS   | 5   | FEB   | 16  | Derwent World Patents Index (DWPI) Revises Indexing                                     |
|        |     |       |     | of Author Abstracts   |
| NEWS   | 6   | FEB   |     | New FASTA Display Formats Added to USGENE and PCTGEN                                    |
| NEWS   | 7   | FEB   | 16  | INPADOCDB and INPAFAMDB Enriched with New Content                                       |
|        |     |       |     | and Features  |
| NEWS   | 8   | FEB   | 16  | INSPEC Adding Its Own IPC codes and Author's E-mail                                     |
|        |     |       |     | Addresses   |
| NEWS   | 9   | APR   | 02  | CAS Registry Number Crossover Limits Increased to                                       |
|        |     |       |     | 500,000 in Key STN Databases  |
| NEWS   | 10  | APR   | 02  | PATDPAFULL: Application and priority number formats                                     |
| 115110 | 1.1 |       | 0.0 | enhanced  |
| NEWS   |     | APR   |     | DWPI: New display format ALLSTR available   |
| NEWS   | 12  | APR   | 02  | New Thesaurus Added to Derwent Databases for Smooth                                     |
| NEWS   | 1.3 | APR   | 0.2 | Sailing through U.S. Patent Codes<br>EMBASE Adds Unique Records from MEDLINE, Expanding |
| NENS   | 13  | APR   | 02  | Coverage back to 1948   |
| NEWS   | 1.4 | APR   | 0.7 | CA/CAplus CLASS Display Streamlined with Removal of                                     |
| MENO   | 7.4 | Mr IV | 0 / | Pre-IPC 8 Data Fields   |
| NEWS   | 15  | APR   | 0.7 | 50,000 World Traditional Medicine (WTM) Patents Now                                     |
| 112110 |     |       |     | Available in CAplus   |
| NEWS   | 16  | APR   | 07  | MEDLINE Coverage Is Extended Back to 1947   |
| NEWS   | 17  | JUN   | 16  | WPI First View (File WPIFV) will no longer be   |
|        |     |       |     | available after July 30, 2010   |
| NEWS   | 18  | JUN   | 18  | DWPI: New coverage - French Granted Patents   |
| NEWS   | 19  | JUN   | 18  | CAS and FIZ Karlsruhe announce plans for a new  |
|        |     |       |     | STN platform  |
| NEWS   | 20  | JUN   | 18  | IPC codes have been added to the INSPEC backfile  |
|        |     |       |     | (1969-2009)   |
| NEWS   | 21  | JUN   | 21  | Removal of Pre-IPC 8 data fields streamline displays                                    |
|        |     |       |     | in CA/CAplus, CASREACT, and MARPAT  |
| NEWS   | 22  | JUN   | 21  | Access an additional 1.8 million records exclusively                                    |
|        |     |       |     | enhanced with 1.9 million CAS Registry Numbers  |
|        | 0.0 | 7777  | 0.0 | EMBASE Classic on STN   |
| NEWS   | 23  | JUN   | 28  | Introducing "CAS Chemistry Research Report": 40 Years                                   |
|        |     |       |     | of Biofuel Research Reveal China Now Atop U.S. in                                       |

Patenting and Commercialization of Bioethanol NEWS 24 JUN 29 Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 15 JANUARY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN customer agreement. This agreement limits use to scientific research. Use for software development or design, implementation of commercial gateways, or use of CAS and STN data in the building of commercial products is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 18:25:36 ON 08 JUL 2010

=> file caplus, agricola COST IN U.S. DOLLARS

SINCE FILE TOTAL. ENTRY SESSION 0.88 0.88

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 18:27:40 ON 08 JUL 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'AGRICOLA' ENTERED AT 18:27:40 ON 08 JUL 2010

=> s modified (2w) tall (2w) oil/prep PROXIMITY OPERATION NOT ALLOWED

Certain operators may not be nested in combination with other operators. A nested operator is valid only when it occurs at the same

level or above the operator outside the nested phrase as determined by the following precedence list:

- 1. Numeric
- 2. (W), (NOTW), (A), (NOTA)
- 3. (S), (NOTS)
- 4. (P), (NOTP)
- (L), (NOTL) AND, NOT 5.
- OR

For example, '(MONOCLONAL(W)ANTIBOD?)(L)ANTIGEN?' is valid since (W) is above (L) on the precedence list. However,

'((THIN(W)LAYER)(L)PHOSPHOLIPID#)(A)LACTONE#' is not valid since (L) is below (A) on the precedence list. The only exception is the 'OR' operator. This operator may be used in combination with any other operator. For example, '(ATOMIC OR NUCLEAR)(W) REACTOR' is valid.

```
=> s (modified (2w) tall (2w) oil)/prep
PROXIMITY OPERATION NOT ALLOWED
Certain operators may not be nested in combination with other
operators. A nested operator is valid only when it occurs at the same
level or above the operator outside the nested phrase as determined by
the following precedence list:
                        Numeric
                        (W), (NOTW), (A), (NOTA)
                  2.
                  3.
                        (S), (NOTS)
                  4.
                        (P), (NOTP)
                  5.
                        (L), (NOTL)
                  6.
                        AND, NOT
                  7.
                        OR
For example, '(MONOCLONAL(W)ANTIBOD?)(L)ANTIGEN?' is valid since (W)
is above (L) on the precedence list. However,
'((THIN(W)LAYER)(L)PHOSPHOLIPID#)(A)LACTONE#' is not valid since (L)
is below (A) on the precedence list. The only exception is the 'OR'
operator. This operator may be used in combination with any other
operator. For example, '(ATOMIC OR NUCLEAR)(W)REACTOR' is valid.
=> s modified (2w) tall (2w) oil
          195 MODIFIED (2W) TALL (2W) OIL
=> s 11 and (conjugated (2w) linoleic (2w) acid)
            3 L1 AND (CONJUGATED (2W) LINOLEIC (2W) ACID)
=> d 12 1-3 ibib abs
L2 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        2000:668003 CAPLUS
DOCUMENT NUMBER:
                        133:295809
TITLE:
                        Effects of modified tall
                        oil versus a commercial source of
                        conjugated linoleic acid
                        and increasing levels of modified
                        tall oil on growth performance and
                        carcass characteristics of growing-finishing pigs
AUTHOR(S):
                        O'Quinn, P. R.; Nelssen, J. L.; Goodband, R. D.;
                        Unruh, J. A.; Woodworth, J. C.; Smith, J. S.; Tokach,
                        M. D.
CORPORATE SOURCE:
                        Department of Animal Sciences and Industry, Kansas
                        State University, Manhattan, 66506, USA
                        Journal of Animal Science (Savov, Illinois) (2000),
SOURCE:
                        78(9), 2359-2368
                        CODEN: JANSAG; ISSN: 0021-8812
PUBLISHER:
                        American Society of Animal Science
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
     Two expts, were conducted to evaluate the effects of conjugated
     linoleic acid (CLA)-enriched feed additives for swine.
```

These additives included a source of CLA that was com. available (CLA-60)

36 barrows (initially 37.6  $\pm$  2.8 kg) to compare the effects of CLA-60 and MTO on growth performance and carcass characteristics of finishing

and modified tall oil (MTO). Experiment 1 used

pigs. The corn-soybean meal diets contained .50% soybean oil (control), .50% CLA-60, or .50% MTO. Pigs fed CLA-60 had less (P = .03) ADG from 37.6 to 72.6 kg than the control pigs; otherwise, pigs fed either CLA-60 or MTO had growth performance similar (P > .15) to that of the control pigs. Pigs fed MTO grew faster (P = .03) and consumed more feed (P = .10) over the duration of the experiment (37.6 to 106.4 kg) than pigs fed CLA-60. Dietary treatment did not affect (P > .15) plasma triglycerides or carcass characteristics, but pigs fed either MTO or CLA-60 had greater saturation of fatty acids in the adipose tissue at the 10th rib than pigs fed the control diet. Experiment 2 used 80 barrows (initially 33.4 ± 2.2 kg) to examine the effects of increasing levels of MTO on growth performance and carcass characteristics of finishing pigs. The corn-soybean meal diet contained 1% cornstarch, which was replaced with MTO to give dietary levels of .25, .50, or 1.00% MTO. Dietary treatment did not affect (P > .15) growth performance. Feeding increasing levels of MTO quadratically decreased (P = .02) average backfat thickness and longissimus muscle drip loss (P = .04) and quadratically increased longissimus muscle area (P = .07) and percentage lean (P = .03). Feeding MTO tended to increase belly firmness (P < .10) compared with pigs fed the control diet. These traits appeared to be optimized with .50% MTO. In summary, pigs fed MTO had greater ADG, ADFI, and ending BW than pigs fed CLA-60. Feeding MTO does not appear to affect growth performance but improves carcass lean content and may addnl. improve some aspects of meat quality in growing-finishing pigs.

OS.CITING REF COUNT: 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:78906 CAPLUS DOCUMENT NUMBER: 132:107334

TITLE: Modified tall oil

-supplemented diet for growing-finishing pigs INVENTOR(S): O'Quinn, Patrick R.; Owen, Kevin Q.; Nelssen, Jim L.;

Tokach, Mike; Goodband, Robert D.

PATENT ASSIGNEE(S): Kansas State University Research Foundation, USA

SOURCE: U.S., 7 pp. CODEN: USXXAM DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----------A 20000201 US 1998-41926 19980313 US 1998-41926 19980313 US 6020377 PRIORITY APPLN. INFO.:

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Modified tall oil-supplemented pig diet is

provided which increases the average daily gain and improves the carcass characteristics of pigs. The diets of the invention include 12-50 % total protein (e.g., from corn and soy) and 0.25-0.75 % modified tall oil. In one embodiment, the diet includes a mixture

of conjugated linoleic acids having a

specific fatty acid profile.

OS.CITÎNG REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.2 ANSWER 3 OF 3 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2010) on STN

ACCESSION NUMBER: 2001:10022 AGRICOLA

DOCUMENT NUMBER: IND22081516

TITLE: Effects of modified tall

oil versus a commercial source of

conjugated linoleic acid and increasing levels of modified

and increasing levels of modified tall oil on growth performance and

carcass characteristics of growing-finishing pigs.

AUTHOR(S): O'Quinn, P.R.; Nelseen, J.L.; Goodband, R.D.; Unruh,
J.A.; Woodworth, J.C.; Smith, J.S.; Tokach, M.D.

AVAILABILITY: DNAL (49 J82)

SOURCE: Journal of animal science, Sept 2000. Vol. 78, No. 9.

p. 2359-2368

Publisher: Savoy, IL : American Society of Animal

Science.

CODEN: JANSAG; ISSN: 0021-8812

NOTE: Includes references

PUB. COUNTRY: Illinois; United States

DOCUMENT TYPE: Article

FILE SEGMENT: U.S. Imprints not USDA, Experiment or Extension

LANGUAGE: English

AB Two experiments were conducted to evaluate the effects of conjugated linoleic acid (CLA)-enriched feed

additives for swine. These additives included a source of CLA that was

commercially available (CLA-60) and modified tall oil (MTO). Experiment 1 used 36 barrows (initially 37.6 +/- 2.8 kg) to compare the effects of CLA-60 and MTO on growth performance and carcass characteristics of finishing pigs. The corn-soy-bean meal diets contained .50% soybean oil (control), .50% CLA-60, or .50% MTO. Pigs fed CLA-60 had less (P = .03) ADG from 37.6 to 72.6 kg than the control pigs; otherwise, pigs fed either CLA-60 or MTO had growth performance similar (P > .15) to that of the control pigs. Pigs fed MTO grew faster (P = .03) and consumed more feed (P = .10) over the duration of the experiment (37.6 to 106.4 kg) than pigs fed CLA-60. Dietary treatment did not affect (P > .15) plasma triglycerides or carcass characteristics, but pigs fed either MTO or CLA-60 had greater saturation of fatty acids in the adipose tissue at the 10th rib than pigs fed the control diet. Experiment 2 used 80 barrows (initially 33.4 +/- 2.2 kg) to examine the effects of increasing levels of MTO on growth performance and carcass characteristics of finishing pigs. The corn-soybean meal diet contained 1% cornstarch, which was replaced with MTO to give dietary levels of .25, .50, or 1.00% MTO. Dietary treatment did not affect (P > .15) growth performance. Feeding increasing levels of MTO quadratically decreased (P = .02) average backfat thickness and longissimus muscle drip loss (P = .04) and quadratically increased longissimus muscle area (P = .07) and percentage lean (P = .03). Feeding MTO tended to increase belly firmness (P < .10) compared with pigs fed the control diet. These traits appeared to be optimized with .50% MTO. In summary, pigs fed MTO had greater ADG, ADFI, and ending BW than pigs fed CLA-60. Feeding MTO does not appear to affect growth performance but

improves carcass lean content and may additionally improve some aspects of meat quality in growing-finishing pigs.

```
=> d his
     (FILE 'HOME' ENTERED AT 18:25:36 ON 08 JUL 2010)
    FILE 'CAPLUS, AGRICOLA' ENTERED AT 18:27:40 ON 08 JUL 2010
           195 S MODIFIED (2W) TALL (2W) OIL
L2
             3 S L1 AND (CONJUGATED (2W) LINOLEIC (2W) ACID)
=> s 11 and (fatty (2w) acid)
           61 L1 AND (FATTY (2W) ACID)
=> s tall (2a) oil (2a) fatty (2a) acid
         4219 TALL (2A) OIL (2A) FATTY (2A) ACID
=> s 14 and 11
           46 L4 AND L1
=> s 15 and (linoleic (2w) acid)
            3 L5 AND (LINOLEIC (2W) ACID)
=> s 16 not 12
            3 L6 NOT L2
L7
=> d 17 1-3 ibib abs
L7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        1998:429986 CAPLUS
DOCUMENT NUMBER:
                        129:111254
ORIGINAL REFERENCE NO.: 129:22799a,22802a
                        Anionic bituminous emulsions with improved adhesion
                        Schilling, Peter; Crews, Everett
```

TITLE: INVENTOR(S):

PATENT ASSIGNEE(S): Westvaco Corp., USA

SOURCE: U.S., 6 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE     |
|------------------------|------|----------|-----------------|----------|
|                        |      |          |                 |          |
| US 5772749             | A    | 19980630 | US 1997-929837  | 19970915 |
| PRIORITY APPLN. INFO.: |      |          | US 1997-929837  | 19970915 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

This invention relates to rapid set, medium set, and slow set anionic emulsions prepared from straight bitumen or bitumen modified by the incorporation of polymers such as styrene butadiene rubbers (SBR), styrene block copolymers (SBS), ethylene vinyl acetate copolymers (EVA), and other suitable modifiers. The invention also relates to emulsions modified by the incorporation of solvents (such as diesel oil or kerosene) or by the addition of polymer latexes (such as SBR-latex or natural rubber latex). More particularly, the invention relates to improved methods for enhancing adhesion between asphalt and aggregate in anionic solventless and

```
solvent-containing bituminous emulsions wherein the emulsifiers are alkali
     earth salts of tall oil fatty acids
     , fortified tall oil fatty acids,
     tall oil rosins, and fortified rosins as well as
    combinations of kraft lignins and nonionic emulsifiers. The adhesion
    promoting compns. utilized in these improved methods are produced by
    reacting tall oil fatty acid
     and/or modified tall oil fatty
     acid to yield a polyalkylene amine, then blending the
     polyamidoamine with Bis-hexamethylenetriamine to produce the adhesion
    promoter.
OS.CITING REF COUNT:
                       5
                              THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
                               (5 CITINGS)
REFERENCE COUNT:
                       41
                              THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 2 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        1990:181468 CAPLUS
DOCUMENT NUMBER:
                        112:181468
ORIGINAL REFERENCE NO.: 112:30691a,30694a
                        Oxidative film formation of melamine-formaldehyde
TITLE:
                        oligomers modified with unsaturated fatty acids
AUTHOR(S):
                        Semina, R. A.; Mikhailova, T. B.; Makotkin, A. V.;
                        Livshits, R. M.
CORPORATE SOURCE:
                        GIPI, USSR
SOURCE:
                        Lakokrasochnye Materialy i Ikh Primenenie (1989), (4),
                        CODEN: LAMAAD: ISSN: 0023-737X
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        Russian
    Modification of oligomeric melamine-HCHO resin (I) with tall-
     oil fatty acids gave film-forming materials
     with low content of volatile compds. capable of oxidative crosslinking.
     The obtained coatings exhibited properties similar to those of alkyd
     coatings and superior to those of nonmodified I-based coatings.
     Investigations conducted on model oligomers obtained by acidolysis of
     hexamethoxymethylmelamine with linoleic and linolenic
     acids showed that a significant role in crosslinking I oligomers
    plays homocondensation of MeO groups. This reaction can be catalyzed by
    products of oxidation of unsatd, fatty acid residues.
OS.CITING REF COUNT:
                              THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
                               (1 CITINGS)
    ANSWER 3 OF 3 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        1961:96393 CAPLUS
DOCUMENT NUMBER:
                        55:96393
ORIGINAL REFERENCE NO.: 55:18134g-i,18135a-c
TITLE:
                        Synthesis of alkyd resins modified with
                        Bulgarian tall oil
AUTHOR(S):
                        Rankov, G.; Popov, As.; Chobanov, D.; Lazarenko, E.
SOURCE:
                        Izvest, Khim, Inst. Bulgar Akad, Nauk (1957), 5,
                        359-76
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        Unavailable
     Analysis of Bulgarian tall oil showed: n20D 1.5095, acid number 160.6,
saponification
    number 169.3, I number 155.0, hexabromide number 0.0, fatty acids 49.3, rosin
```

acids

 $38.9, \,\, unsaponifiables \, 8.9, \,\, and \,\, oxidized acids \,\, 3.7\%. \,\, Analysis of fatty acids showed: n20D <math display="inline">1.4754, \,\, acid \,\, number \,\, 177.5, \,\, saponification number 190.8, \,\, Inumber \,\, 140.1,$ 

hexabromide number 0.0, oleic acid 25.5, linoleic acid 64.7, and saturated acids 9.7%. The crude tall oil was fractionally distilled into 3 fractions: 210°, 45%, dark yellow; 210-25°, 18%, yellow; and 225-40°, 10%, light yellow plus a distillation residue. After 2-3 days rosin acids crystallized from the 2 higher-b, fractions and were removed by filtration. In the preparation of the alkyds, the crude tall oil, the 2 lower-b. fractions, and the residue were used. The ratio was 2 tall oil: 1 phthalic anhydride with the stoichiometric amount plus 10% of glycerol, sp. gr. 1.260. The resin from crude tall oil was liquid, clear, dark brown, and soluble in toluene, alc., and C6H6; from the 210° fraction it was viscous, tacky, light yellow, transparent, and soluble in the same solvents as above; from fraction 210-25°, it was identical to fraction 210° but less soluble; and from the residue it was solid, dark brown, not completely clear, practically insol. in alc. but soluble in a mixture of alc. and toluene. Lacquers at varying ratios, with and without linseed oil, I number 169, were prepared Each lacquer was divided into 3 samples and evaluated: as is, with Co resinate, 0.01% Co, and with Mn resinate, 0.02% Mn. Cast films were air dried and baked, and their phys. properties were evaluated. All lacquers except those with a high content of tall oil had high gloss. Hardness, impact resistance, elasticity, adhesion, mineral oil, and resistance to toluene were equal to the linseed-oil-modified alkyd-resin standard. The H2O resistance of air-dried tall oil resin lacquers was low but compared favorably to the standard when baked. Air dried films from resins prepared from fractions 210° and 210-25° are almost colorless, becoming yellow-brown when baked at 180° and dark brown at 220°, while those from resins prepared from crude or residue were yellow-brown when air dried and very dark brown when baked at 220°. Speed of dry was also noted for all lacquers.

#### => d his

(FILE 'HOME' ENTERED AT 18:25:36 ON 08 JUL 2010)

```
FILE 'CAPLUS, AGRICOLA' ENTERED AT 18:27:40 ON 08 JUL 2010
L1
            195 S MODIFIED (2W) TALL (2W) OIL
L2
             3 S L1 AND (CONJUGATED (2W) LINOLEIC (2W) ACID)
L3
             61 S L1 AND (FATTY (2W) ACID)
T.4
           4219 S TALL (2A) OIL (2A) FATTY (2A) ACID
1.5
            46 S L4 AND L1
1.6
              3 S L5 AND (LINOLEIC (2W) ACID)
T.7
              3 S L6 NOT L2
=> s (tall (2a) oil (2a) fatty (2a) acid) (s) (portion or fraction)
            71 (TALL (2A) OIL (2A) FATTY (2A) ACID) (S) (PORTION OR FRACTION)
=> s 18 and (linoleic (2w) acid)
L9
            10 L8 AND (LINOLEIC (2W) ACID)
```

=> d 19 1-10 ibib abs

L9 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:39167 CAPLUS

DOCUMENT NUMBER: 88:39167

ORIGINAL REFERENCE NO.: 88:6155a,6158a

TITLE: Composition of tall-oil fatty acids containing up to

25% resin acids manufactured in Bulgarian pulp and

paper mills AUTHOR(S): Gerasimova-Pulieva, N.; Dimitrova, S.; Petrova, V.

Bula. CORPORATE SOURCE:

SOURCE: Gidroliznava i Lesokhimicheskava Promyshlennost

(1977), (7), 30-1

CODEN: GLKPA2: ISSN: 0016-9706 DOCUMENT TYPE: Journal

LANGUAGE:

Russian The main resin acids in the fraction of the title tall

-oil fatty acids containing ≤25% rosin

acids (as identified by gas-liquid chromatog.) are: abietic acid [514-10-3]

45.63, pimaric acid [127-27-5] 26.47, and sandaracopimaric acid

[471-74-9] 5.51%. The major fatty acids of the tall-

oil fatty acid fraction are: oleic

acid [112-80-1] 62.92, linoleic acid [60-33-3] 12.95, and linolenic acid [463-40-1] 11.32%.

ANSWER 2 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1976:4485 CAPLUS DOCUMENT NUMBER: 84:4485

ORIGINAL REFERENCE NO.: 84:761a,764a TITLE:

Dicarboxvlic acids INVENTOR(S): Ward, Benjamin F. PATENT ASSIGNEE(S): Westvaco Corp., USA

SOURCE: Can., 11 pp. CODEN: CAXXA4

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO.  | DATE     |
|------------------------|------|----------|------------------|----------|
|                        |      |          |                  |          |
| CA 971577              | A1   | 19750722 | CA 1972-154600   | 19721023 |
| PRIORITY APPLN. INFO.: |      |          | CA 1972-154600 A | 19721023 |

GI For diagram(s), see printed CA Issue.

On heating a mixture of distilled tall oil fatty

acids with CH2:CHCO2H at 250° in the presence of iodine the linoleic acid portion of the fatty acids

underwent addition reaction to give the dicarboxylic acid I (x = 2, 3) and

linoleic free tall oil fatty acids

. I was separated from the reaction mixture by fractional distillation and was further purifd, via distillation of its di-Me ester.

L9 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1975:458269 CAPLUS

DOCUMENT NUMBER: 83:58269

ORIGINAL REFERENCE NO.: 83:9183a,9186a

Dicarboxylic acid from linoleic acid TITLE:

INVENTOR(S): Ward, Benjamin Franklin PATENT ASSIGNEE(S): Westvaco Corp., USA SOURCE:

Brit., 6 pp. CODEN: BRXXAA

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. GB 1373316 A 19741106 GB 1972-48767 19721023 PRIORITY APPLN. INFO.: GB 1972-48767 19721023

GI For diagram(s), see printed CA Issue.

AB The title decarboxylic acid I (R = 2- or 3-CO2H) was prepared from the

linoleic acid portion of distilled tall

oil fatty acids by treating the mixture with

CH2:CHCO2H in the presence of iodine; I was separated from the fatty acids (now linoleic acid-free) by fractional distillation Thus,

treatment of a tall oil-derived fatty acid mixture containing 41.4 weight % linoleic acid with CH2:CHCO2H and 0.15 weight % iodine 0.75

hr at 250° gave a mixture containing 42 weight % I and 0.6 weight % linoleic acid.

ANSWER 4 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1975:158117 CAPLUS DOCUMENT NUMBER: 82:158117

ORIGINAL REFERENCE NO.: 82:25259a,25262a

TITLE:

Treatment of tall oil fatty acids:
Ward, Benjamin F. INVENTOR(S): INVENTOR(S): Ward, Benjamin PATENT ASSIGNEE(S): Westvaco Corp.

SOURCE: U.S., 4 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 3860569 A 19750114 US 1973-426503 19731220 RITY APPLN. INFO.: US 1972-216226 A2 19720107 PRIORITY APPLN. INFO.:

AB A smaller amount of catalyst was used when a 1:1-5 Br [7553-56-2]-I [7726-95-6] mixture was used instead of I to catalyze the conversion of the

linoleic acid (I) [60-33-3] portion of tall oil fatty acids to oleic acid

[112-80-1]. Thus, tall oil fatty acids containing 43.2% I were mixed with 0.05% I and 0.075% Br and heated at 485°F for 1 hr to give fatty

acids containing 3.9% I, compared with 5.5% I when 0.2% I was used as the catalvst.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L9 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1970:79928 CAPLUS DOCUMENT NUMBER: 72:79928 ORIGINAL REFERENCE NO.: 72:14579a,14582a

Polycarbonates of diols derived from dimeric fat acids TITLE:

INVENTOR(S): COURY, Arthur J.; Wicklatz, John E. SOURCE: General Mills, Inc.

U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. US 3493534 A 19700203 A 19700203 US 1967-689288 19671211 US 1967-689288 A 19671211 PRIORITY APPLN. INFO.:

250

The Me esters of the dimer fraction of polymerized tall oil fatty acids (containing 40-5% linoleic

acid) are reduced in the presence of iso-Bu2AlH to prepare diols which are mixed with bisphenol A and pyridine in CH2Cl2 and treated with COC12 to prepare polycarbonates having better flexibility and

stress-cracking resistance than polycarbonates of bisphenol A and COC12. The flexible polycarbonates are useful as coatings, sealants, adhesives,

etc. Thus, COC12 was bubbled into a solution (cooled at 25°) of diols (prepared as described above) 30 (0.113 equivalent), pyridine 87, and bisphenol A 70 q in 500 ml CH2Cl2 at 0.8 g/min for .apprx.40 min and at 0.3 g/min

for 50 min until 49 g was added. Pyridine-HCl precipitated after 35 min, and

ml CH2Cl2 was added after 75 min. The mixture was washed with 10% aqueous HCl, H2O, and aqueous MeOH until neutral, and the organic solution was triturated with

C6H14 to give 100 g polycarbonate of mol. weight 42,300. After molding at 240°, the polymer had a tensile strength of 6900 psi and an

elongation of 107-145%, and it had greater stress-cracking resistance than a polycarbonate prepared without the diols.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L9 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1967:10618 CAPLUS DOCUMENT NUMBER: 66:10618

ORIGINAL REFERENCE NO.: 66:2019a,2022a

TITLE: Preparation of free-flowing finely grained non-caking

INVENTOR(S): Malley, Thomas J.; DeLapp, Darwin F.

INVENTOR(S): PATENT ASSIGNEE(S): American Cyanamid Co.
SOURCE: Ger., 4 pp.

CODEN: GWXXAW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 19661027 DE 1959-A33589 US DE 1227444 19591223 PRIORITY APPLN. INFO.: 19581226

The title compns. consist of at least 95% by weight of urea with an average particle size of 250-6000  $\mu$  with 0.2 to 8 weight %, based on the weight of the urea, of a fatty acid, a fatty acid amide, a fatty acid ester, a fatty alc., mixts. of these, or a normal aliphatic hydrocarbon with 7 to 50 C atoms or a mixture of these. These compds. serve as adduct forming agents. Fatty acid rich tall oil

fractions may also be used. The components are mech. mixed at 15 to 115°. The urea is brought into contact by mech, rotation with a stream of steam. The conversion is carried out with an adduct forming agent which is dissolved in organic solvent in which the urea is not particularly soluble For example, 45.4 kg. of finely divided urea particles ground from melt and with particle size of about 1200 µ and containing 95% urea was heated at 95° and rotated in a cylinder which rotated fast enough to yield a cascade or a rolling motion around the bed of material. During 8 min., 0.34 kg. of a fatty acid rich tall oil mixture of the following composition was added; oleic acid 50%, linoleic acid 46%, solid fatty acids 4%, and rosin acids and unsaponifiables 10%. This was continuously sprayed in for 8 min. The so treated warm particles were then rotated for about 1 hr. more and cooled to 30°. By this treatment, the turbid and dull particles were changed to glistening white spherical particles. They were removed from the cylinder and had essentially the same particle size as before the treatment. The particles produced had an extraordinary large resistance to caking in a moist atmospheric

L9 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1963:9722 CAPLUS

DOCUMENT NUMBER: 1963:9722

ORIGINAL REFERENCE NO.: 58:1652b-d

TITLE: Gas chromatography of tall oil fatty acids

AUTHOR(S): Sandermann, W.; Weissmann, G.

CORPORATE SOURCE: Inst. Holzchemie, Reinbek/Bez. Hamburg, Germany SOURCE: Fette, Seifen, Anstrichmittel (1962), 64, 807-13

carrier gas in the analysis of the component fatty acids in

CODEN: FSASAX; ISSN: 0015-038X

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable
AB Apiezon oil and polyester stationary phases were used with He as the

tech. tall oil, fresh pinewood fatty

acids, the lst fractions of the tall-oil distillation, and sulfate pitch. The fresh pine distillate-fatty acid mixture contained C16 1, oleic 32.4, linoleic 44.3. triunsatd. C18 14, and higher fatty acids 5.5%. The acid composition of tech. tall oil was palmitic 3.5, oleic 56, lineoleic 37, and triunsatd. C18 2%. The initial fraction of the tall-oil distillation was subdivided into 4 fractions b. 55-65°, 65-100° 100-65° and 165-70°. Fraction I contained mainly caprylic and pelargonic acids with small amts. of capric, benzoic, and lower unsatd. acid. Fraction 2 yielded mainly capric and lauric acids with small amts. of cinnamic, 4-decenoic, and C8-, C9-, and C11-saturated acids. The acid composition of fraction 3 was C14 4.5, C15 1.0, C16 32.0, C16 unsatd. plus unidentified saturated 16.0, oleic 16.0, linoleic 17.0, triunsatd. C18 6.0%. The unidentified acid in this fraction could, according to ts

retention volume, be a branched-chain C16 acid. Fraction 4 is fairly homogeneous and corresponds in its acid composition to the com. tall oil fatty acids, i.e. oleic 44, linoleic 43, and triunsatd. C18 12%, with traces of palmitic acids.

Fractions 3 and 4 contain 95% of all the acids. The acid composition of the distillable fraction of sulfate pitch is Cl6 5.5, oleic 40.0, linoleic 25.5, triunsatd. Cl8 3.5, C20 21.5, C22 2.0, and C24 1.0%. The presence of Cl6 and Cl8 acids in pitch cannot be explained. The low acid value of the pitch indicates that most acids exist as esters of sterol or other alcs.

L9 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1962:429997 CAPLUS

DOCUMENT NUMBER: 57:29997

ORIGINAL REFERENCE NO.: 57:6045e-f

TITLE: Studies in soap crystallization processes. III. Acid

soap crystallization in the segregation of tall oil

fatty acids

AUTHOR(S): Meade, Edwin M.

CORPORATE SOURCE: Meade Lab. & Process Co., Unionville, Can.

SOURCE: Journal of the American Oil Chemists' Society (1962),

39, 235-7 CODEN: JAOCA7; ISSN: 0003-021X

DOCUMENT TYPE: Journal Unavailable

LANGUAGE:

Tall-oil fatty acids were

fractionated into fraction products of 80-90% oleic acid (I) and

60-80% linoleic acid by precipitation of I as acid soap from polar solvents according to the method described in U.S. 2,915,539 (CA 54,

17416a).

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

ANSWER 9 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1958:45531 CAPLUS

DOCUMENT NUMBER: 52:45531

ORIGINAL REFERENCE NO.: 52:8187f-h

TITLE: Adducts of long-chain olefinic acid amides and fumaric

acid esters INVENTOR(S): Dazzi, Joachim

PATENT ASSIGNEE(S): Monsanto Chemical Co. DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE 19571231 US 1954-406337 19540126 Esters of fumaric acid react with higher olefinic amides to give adducts.

Depending on the conditions of reaction, the number of moles fumarate added varies from 1-4/mole unsatd. amide. The adduct formation has been studied particularly with a mixture of N,N-dimethylamides of the commercially available tall oil fatty acid fraction known as Acintol FA Number 2 whose composition by weight is 50%

oleic acid, 48% linoleic acid, and 2% saturated acids.

The above mixture of N,N-dimethylamides (123.6 g.), 273 g. n-butyl fumarate, and 0.6 g. di-tert-butylpyrocatechol was refluxed (with stirring), 6 hrs. (240-251°) through a Dean-Stark trap and then distilled in vacuo to give 83.9 g. unreacted fumarate, b1 to 160°, n25D 1.4440, 80.5 g. fraction, bl 160-208°, n25D 1.4632, containing 2.43% N and having an

iodine number of 47.43. The residual viscous liquid had n25D 1.4717, 1.48% N, and had an iodine number of 30.26, indicating it to be a mixture of 1:1, 1:2, and 1:3 amide-fumarate addition product. Data on the characteristics of a composition consisting of 60 parts polyvinyl chloride and 40 parts viscous adduct are included. The amide-fumarate adducts of the above type are valuable plasticizers for polyvinyl chloride and copolymers of at least

70% by weight vinyl chloride and up to 30% by weight unsatd. monomer like vinyl

acetate or vinylidene chloride.

L9 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1947:17967 CAPLUS

DOCUMENT NUMBER: 41:17967

ORIGINAL REFERENCE NO.: 41:3617i,3618a-b

TITLE: Canadian tall oils - their compositions and potential

AUTHOR(S): Burch, G. N. Blair; Shaw, Allan C.; Nicholls, R. V. V.

CORPORATE SOURCE: McGill Univ., Montreal, Can.

SOURCE:

Pulp & Paper Magazine of Canada (1947), 48(No. 3), 127-32

CODEN: PPMCAW; ISSN: 0033-4103

DOCUMENT TYPE: Journal

LANGUAGE . Ilnavai lable

Analyses are given of 6 samples of tall oil obtained from the pulping of various mixts. of balsam fir, Douglas fir, cedar, hemlock, spruce, and jack pine; a composite sample contained 1% H2O and had an acid number of 115, saponification number of 142, and I number of 216; these values are compared

with those

for American, Finnish, and Swedish tall oils. The tall oil contained fatty acids 46.4%, resin acids 28, and neutral substances 25.2%. The fatty acids consist of linolenic acid 0.7, conjugated linolenic acid 0-1, linoleic acid 25.6, conjugated linoleic acid 21.4, oleic acid 2.4, and saturated acid (believed to be stearic acid) 49.8.%; the tall oils do not contain fatty acids of the Cl6 series. The fatty acid fraction is to be classified as a semidrying oil. The

phytosterol content varies from 3.9 to 12.7% (average 9%). 45 references.

=> FIL STNGUIDE

COST IN U.S. DOLLARS SINCE FILE TOTAL. ENTRY SESSION FULL ESTIMATED COST 108.01 108.89 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE -12.75-12.75

FILE 'STNGUIDE' ENTERED AT 18:39:49 ON 08 JUL 2010 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Jul 2, 2010 (20100702/UP).

=> d his

(FILE 'HOME' ENTERED AT 18:25:36 ON 08 JUL 2010)

FILE 'CAPLUS, AGRICOLA' ENTERED AT 18:27:40 ON 08 JUL 2010

195 S MODIFIED (2W) TALL (2W) OIL

L2 3 S L1 AND (CONJUGATED (2W) LINOLEIC (2W) ACID) L3

61 S L1 AND (FATTY (2W) ACID) L4 4219 S TALL (2A) OIL (2A) FATTY (2A) ACID

1.5 46 S L4 AND L1

1.6 3 S L5 AND (LINOLEIC (2W) ACID)

| L:      | 8 71 S (TALL (2A) OIL (2A) FATTY (2A) ACID) (S) (PORTION OR FRACTION  |
|---------|---|
|         | FILE 'STNGUIDE' ENTERED AT 18:39:49 ON 08 JUL 2010  |
| A:<br>L | > log off<br>LLLL# QUERLES AND ANSWER SETS ARE DELETED AT LOGOFF<br>OGOFF? (Y)/N/HOLD:Y<br>TN INTERNATIONAL LOGOFF AT 18:40:36 ON 08 JUL 2010 |